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ABSTRACT

This is an interim report of the second full year of the "Fifteen Point Plan." Although majority of comparisons between groups shows no significant statistical differences, differentials in achievement may become more noticeable as the program effects are reinforced with time, and through cumulative experience. From data analyzed after two full years of study, it now appears that black pupils who attend integrated classes at their neighborhood school which has some specifically funded enrichment emphasis, achieve at a slightly greater rate than children in compensatory programs or those who commute to outer city integrated schools. Pupils in the two grade levels surveyed at the control school more frequently reflect achievement levels which are lower than those of either the comensatory or integrated programs. The achievement of white children enrolled at an inner city school is generally not different from that of their home school counterparts; if a difference appears, it seems to favor those who attend the enriched inner city school setting. [For a related report, see ED 023 746. Of the findings on eight questions originally appended, only those relating to questions 1-7 (Appendices B through H) are found in this document.] (Author/JM)

ED0 43715

CITY SCHOOL DISTRICT
ROCHESTER, NEW YORK

AN INTERIM REPORT

ON

A FIFTEEN POINT PLAN TO REDUCE RACIAL ISOLATION

AND

PROVIDE QUALITY INTEGRATED EDUCATION

UD010670

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July, 1969

I. PREFACE

The Fifteen Point Program has now been in operation for two complete years. This, the second annual interim evaluation report, for continuity purposes, recapitualtes the guiding philosophy and series of activities both leading up to the initiation of the Fifteen Point Program and prevailing during its first year. Interjected and appended to this recapitulation will be 1968-69 statuses and references.

II. INTRODUCTION

On August 27, 1963, the Board of Education of the City School District of Rochester, New York, unanimously adopted a policy statement committing its future actions to the reduction of racial imbalance in schools in which such imbalance existed. In its policy statement, the Board recognized that "one of the functions of the public schools is to prepare children for life in a democratic society" and that "the fulfillment of this function depends in part upon the degree to which children have opportunities during their public school careers to become acquainted with children from a variety of cultures."

As an outgrowth of its policy statement, the Board of Education on November 21, 1963, directed the administration to initiate steps to implement the Open Enrollment Plan. This plan established the practice of children being voluntarily transferred into one of several schools in which there was both available space and where the racial composition was in need of some balancing measures. On February 3, 1964, more than 500 children from the inner city began this new experience.

As a result of the Open Enrollment Plan, every elementary school in the City School District has some black children included in its enrollment.

Following the implementation and operation of the Open Enrollment Plan, the West Irondequoit Central School District requested the Rochester Board of Education to transfer children from the inner city to its schools. In September 1965, the West Irondequoit Public Schools enrolled twenty-five first grade children from Rochester's William H. Seward School No. 19. An additional twenty-five first graders entered the program both in September 1966 and September 1967. In 1968, the West Irondequoit School Board authorized twelve more pupils to attend. A total of seventy-four primary grade children are presently in attendance in West Irondequoit neighborhood schools.

Following a summer program in 1966, the Brockport Campus School agreed to enroll thirty-two Rochester children for the 1966-67 school year. This program was expanded in the Fall of 1967 to include eighty children, and again in 1968 increased to 112. Four of the original enrollees now attend the Brockport Central High School.

In February 1967, the Brighton Public Schools enrolled fifty-seven elementary grade children from the City School District and continued the program during the 1967-68 and the 1968-69 school years.

To date, some 440 Rochester pupils attend school in either the public or parochial schools of its suburbs. In addition to the aforementioned school districts, others receiving Rochester pupils include: Penfield, Pittsford, Wheatland-Chili, Hilton, Greece, and East Rochester. A private school, Harley, and the Rochester Christian School complete this listing.

As a result of these various programs, a number of children from racially imbalanced schools have participated in integrated school experiences during the past five years. Though implementation of these programs has contributed toward reducing the racial imbalance in many of the receiving schools, in others the imbalance has continued to increase.

In a major effort to offer a long-range solution to the problem of racial imbalance, the City School District during the 1966-67 school year prepared a series of plans for the desegregation of the elementary schools. These plans were presented to the Board of Education on February 1, 1967.

Three locally developed plans and a fourth plan, developed by the Center for Urban Education of New York City, were included in the report. Possible interim steps as well as long-range proposals were presented. Copies of this report entitled, Desegregation of the Elementary Schools, are on file with the New York State Education Department. After several weeks of intensive community deliberation and Board of Education study, the Rochester Board of Education adopted the "Fifteen Point Plan" to further reduce racial isolation. This plan utilized selected features of the Combination Plan presented in the desegregation report, but added specific steps which could be implemented in the immediate future.

Overall, the Fifteen Point Plan has as dual objectives the reduction of racial isolation and the provision of quality integrated education for all children.

The fifteen points are quoted as follows:

1. Use selected features of the Combination Plan but add additional steps within the city together with those that may be made possible through the cooperation of the larger community.

2. Reduce class size sharply in September 1967 in Grades K-3 at Nathaniel Rochester School No. 3 to approximately fifteen. In addition, a teacher aide, living in the immediate neighborhood, may be employed for each classroom. A full-time specialist in reading instruction will be added to the staff of School No. 3.

3. Provide a reading specialist for each inner city school in addition to the present supervising and helping teacher programs.

4. Transfer children, with parental permission, in Grades 4 to 6 from School No. 3 to schools in which space exists or can be created by the transfer of some seventh graders to nearby high schools. The receiving schools will include Schools No. 21, No. 30, No. 34, No. 38, No. 41, No. 42, No. 43, and No. 44.

5. Transfer three M.A.P. classes for the gifted to School No. 2 in September 1967 and invite applications from suburban parents for transfer of gifted children to these classes on a tuition basis, as space permits.

6. Implement in September 1967 a program of voluntary, reverse open enrollment to the two new beautiful schools, Clara Barton School No. 2 and Dag Hammarskjold School No. 6, and plan for the establishment of a summer school program, open to students in the city at large, at these two schools under Title I of the Elementary and Secondary Education Act of 1965 for the Summer of 1967.

7. The above voluntary, reverse open enrollment program and relocation of some classes for the gifted for the public schools will be accompanied by a similar program in the Catholic schools as announced yesterday by the Right Reverend Monsignor Roche, Superintendent of Diocesan Schools.

8. Implement the interim World of Inquiry School in September 1967 under Title III of the Elementary and Secondary Education Act of 1965. This interim school, located in the inner city, would house 130 children and would be an integrated school with registration for attendance open citywide and also in the suburbs.

9. Continue to work for the expansion of urban-suburban pupil transfer programs for both the Summer of 1967 and the 1967-68 school year.

10. Continue the integrated pre-kindergarten program at Silvanus A. Ellis School No. 26.

11. Encourage the development of a voluntary cooperative federation of school districts in the region to discuss and plan ways of reducing racial isolation in Monroe County as well as other matters of mutual concern.

12. Continue the Open Enrollment and TRIAD programs and encourage additional participation.

13. Cooperate fully with all community agencies whose programs seek to remove the basic causes of racial isolation.

14. Work closely with the office of the coordinator of the Demonstration Cities Program and other related city departments to strengthen the total effort to upgrade the city through new educational facilities and services. In addition, continue to study the replacement of schools with a view toward site selection that will improve our total educational program to the greatest extent possible as we attempt to achieve quality integrated education.

15. Request the Board of Regents and the Commissioner of Education of New York State to assist the Board of Education in its planning by sending a report on progress made toward the elimination of legal and financial barriers to reducing racial isolation in the schools in the Rochester area.

III. THE PROGRAM

This evaluation report only attempts to treat certain phases of the Fifteen Point Program. In essence, the evaluation may be thought of as having two components.

1. The first is that style of education which has come to be known as "compensatory education." In this approach, no attempt is made to desegregate the racially imbalanced schools. All energies and monies are channeled into increasing staff and supportive and remedial services available to the school with its smaller size classes.

2. The other component features integration of children by way of both the traditional manner, i.e. where black children transfer to schools which have predominantly white pupil populations and the reverse, a unique provision of pupil transfer in which children from predominantly white schools transfer into the core or inner city schools; in this case to a school with a pupil population predominatly black.

COMPONENT ONE

Children in Grades Four through Six from Nathaniel Rochester School No. 3 were transferred to receiving schools in which the percentage of black pupils was below the citywide average. Nathaniel Rochester School No. 3 had an enrollment which was 98.5% black in November 1966. The results of the New York State Pupil Evaluation Program Administered in October 1966 showed that 72% of the children entering first grade in School No. 3 could be defined as educationally disadvantaged; i.e. 72% of the children at this grade level fell below satisfactory levels of readiness for instruction in Reading, as defined by the New York State Education Department. This school had the highest percentage of black children as identified by the racial census and the highest percentage of educationally disadvantaged children as defined by the New York State Pupil Evaluation Program in the Fall of 1966, when compared with all other schools of the City School District.

By transferring children in Grades Four through Six from School No. 3 to receiving schools, space was made available to reduce class size sharply in the remaining grades, Kindergarten through Three. In addition to achieving class size of fifteen pupils or less to one teacher, a teacher aide living in the immediate neighborhood, as far as possible, was employed for each classroom. A full-time reading teacher was also added to the staff of School No. 3.

This program was expanded on a limited basis during the 1968-69 school year to the Chester Dewey School No. 14. This school is also located in the inner city and has an enrollment comprised almost exclusively of black and Puerto Rican pupils. Like School No. 3, it serves an area of the city which has been scarred by poverty and deprivation. By transferring the seventh grades to an integrated secondary school building, it was possible to reduce class size in Kindergarten and Grade One - much like that in School No. 3. In addition, a teacher aide was provided for each two teachers at all grade levels. Five classroom teachers and twelve teacher aides were added to the staff of School No. 14 to provide these services.

Both Schools No. 3 and 14 followed the regular course of study in their instructional programs. In addition, special programs and services were made available through Title I ESEA. These included the Artmobile, Bookmobile, Inter City Bus Trips, and a full-time elementary school counselor. Pupils in these schools were also eligible to apply for voluntary transfer under the Title I Open Enrollment Plan.

COMPONENT TWO

As previously stated, the City School District has operated an open enrollment program since February 1964. At the present time, nine schools located in the inner city send more than 1200 pupils to other city schools. Under the Expanded Open Enrollment Program, children attending schools with heavy concentrations of white pupils were given the opportunity to transfer in a reverse direction to Clara Barton School No. 2, a new school located on Reynolds Street in the inner city and serving pupils in the district adjacent to the School No. 3 district. In 1966, School No. 2 had an enrollment which was 97.9% black. As of March 1969, a total of 193 white pupils at grade levels one through six, having voluntarily transferred into Clara Barton School No. 2, caused the racial census to show white pupils comprising almost 20% of the school's population.

The regular program at School No. 2 was expanded in several ways. One provided instruction in beginning French for intermediate grade pupils. Specialists in Far Eastern Studies, Reading, and Math and Science were added to enrich the daily program and to provide individualized instruction for all pupils. School No. 2 is also involved in Project BEACON, the local segment of the State Project ABLE. Project BEACON is concerned with development of materials and programs in the areas of language arts, Negro History, cultural enrichment, and ego development at the primary grade levels.

Services available to all School No. 2 pupils through Title I ESEA included the Artmobile, Bookmobile, Inter City Bus Trips, and Art Action Centers staffed by a full-time art teacher and an elementary school counselor. Funding problems, which caused an interruption in the health assistant services and reduced the number of field trips, suggests that the program and services of this year differ considerably from last year.

In order to accommodate the pupils transferred into Clara Barton school No. 2, it was necessary for resident pupils to transfer to other schools on a voluntary basis. To date, a total of 340 such students attend schools outside of the School No. 2 area. Many of the schools that received School No. 2 pupils also received intermediate grade pupils from the School No. 3 area; all such schools enrolled pupils from other racially imbalanced schools under the Open Enrollment Plan. The additional services and personnel available to schools receiving School No. 3 pupils and discussed previously, became available to those schools enrolling pupils from Clara Barton School No. 2.

The first full school year of the newly constructed Virgil I. Grissom School No. 7 listed 120 of these transferees as among its pupil population. Many parents and educators view this practice of having pupils from one neighborhood share the experiences in the same building with favor, both from logistical and psychological bases of thought.

Added to School No. 7's modern philosophies, practices, and facilities were enrichment services available to School No. 2 pupils under the Fifteen Point Plan funding. Along with the non-graded and pupil teaming systems of grouping and instruction, the Instructional Materials Resource Center, and Lunchroom Facilities, School No. 7 youngsters were provided an instructional specialist in Science and Mathematics, the Far Eastern Studies program, remedial reading services, and French.

With the school year 1968-69 came the establishment of integrated Kindergarten classes at the Dag Hammarskjold School No. 6. As was spelled out in the Fifteen Point Plan originally, Schools No. 2 and 6 were designated as schools into which reverse open enrollment pupils were to flow. Since attempts to assess differential achievement gains among Kindergarteners proved fruitless last year, the 1968-69 study excludes this segment.

CAUTIONS TO BE EXERCISED

This report, the second of the longitudinal study, may tempt some readers to over-simplify relevant factors and thus draw erroneous conclusions. In formulating and analyzing the data, it was constantly in the minds of the authors that this, the second year, introduces many variables not operative during the first year. As examples:

1. School No. 2, during the second year of the Fifteen Point Program, saw its Principal and Advising Teacher each accept different positions outside the building. Without question, these losses plus the loss of other key teachers, must alter the personality of the instructional group. Forty percent of the School No. 3 and 38.9 percent of the School No. 2 teaching staffs of 1967-68 were not at these respective schools during the 1968-69 school year. With this knowledge, comparisons made between this year's vs. last year's progress at Schools No. 2 and 3 must be tempered.

2. During the 1968-69 school year, Project BEACON embarked upon a program emphasizing the development of reading skills through photography. This pioneering effort has shown the achievement of one classroom of pupils at the Experimental School to excell that of those in two other District schools. Some children from this experimental group are included in the sample drawn to test the relative achievement of those racially segregated at the Experimental School vs. their comparison groups.

3. The reduction in funds available for health office assistants et cetera has already been mentioned. If in fact these services do have an effect upon the students, certainly their absence will be reflected in their achievement, attendance, and enthusiasm for education.

These examples offered are only three of the several which may reflect the difference a year makes. Though one is correct in assuming that the second year should relate to the first, pupils, programs, emphases, staffing, funds, and other factors do not stand still for the researcher.

IV. DESIGN AND DATA ANALYSIS

Twenty-two different schools with approximately 2800 pupils constitute the population parameters for the comprehensive evaluation of the Fifteen Point Plan. Samples were derived from those schools having the largest overall group participation. The essential research elements may be definitively categorized as classes (instructional groups) having the following general characteristics:

Segregation: Classes comprised largely of minority group pupils in an inner city school setting where class size approximates the citywide mean of 26.7. In this study, Schools No. 2 and 4 are designated as those containing classes of this description. While remediation is available at both, the numbers and types of specific programs vary to some degree.

Compensation: Classes comprised largely of minority group pupils in an inner city setting where specific efforts have reduced the number of children in each classroom so as to increase the opportunities for closer pupil-teacher contact. Special remedial and supportive emphases attempt to reduce pupil learning problems (School No. 3).

Integration-In: Classes comprised of white children from the outer city schools who join with minority group children in an inner city school setting. Class size approximates the citywide mean (26.7) and specially funded remedial and enrichment services are available (School No. 2).

Integration-Out: Classes comprised of minority group children joining with resident white children in numerous outer city school settings where class sizes approximate the citywide mean (26.7). Though some remedial services are provided in the receiving schools, they are not as extensive as those found at Schools No. 2 and 3.

Within the context of these four categories, six questions posed in the first interim report serve as the framework of this study. The questions are presented as they generally appeared in the 1967-68 evaluation report with revised class size averages. Two additional questions (QUESTIONS SEVEN AND EIGHT) are included as supplementary research components.

QUESTION 1. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS).

QUESTION 2. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND

THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

QUESTION 3. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

QUESTION 4. HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

QUESTION 5. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND

THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

QUESTION 6. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

QUESTION 7. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

WHITE PUPILS IN THE SAME INTEGRATED SETTING

BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND

WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

QUESTION 8. HOW DOES THE ACHIEVEMENT OF BLACK PUPILS, SEGREGATED IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH PURPOSEFULLY INTEGRATED CLASSES, COMPARE WITH THAT OF BLACK PUPILS IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

Whenever possible, the statistical design used was a matched group technique. The groups being compared were matched on test score means, standard deviations, score ranges, and skewness. When a satisfactory match was not feasible, a one-way analysis of covariance was substituted. The choice of the preferred design was dictated by the desire to compare groups comprised of pupils who had had the same growth rates prior to the experiment. This was needed to permit relatively unambiguous interpretation of the results or outcomes. The use of covariance analysis was relegated to a secondary or back-up procedure because interpretation of results derived from it are limited by the implication [or often neglected assumption] that factors which resulted in the pre differences between the groups produced identically the same pattern of differences during the period of the study. This assumption is likely to be false in pre-post studies of this type, particularly when post differences are in the same direction as the pre differences. In this case, there is too much likelihood that within-groups regression lines are heterogenous; this cannot be safely ignored.

The use of the matched groups design does not resolve all possible problems. At times, this procedure involved omitting certain pupils who ranked low in one group and some who ranked high in another. To the extent that the omissions may have biased the whole group in their own direction during the period of the study, this bias could produce the appearance of experimental effects. The more selected the matching groups have to be, the greater the likelihood that such an effect will occur. Fortunately, it was possible to match most groups by removing only one, two, or three students from the sets. Therefore, relatively little distortion in the ranges of students occurred in the matched groups. Any bias from this source should be slight; however, it should be recognized as a possible feature.

More specifically, participants, whether involved in the Fifteen Point Program for one or two years, were classified into groups according to the descriptions identified in the categories: Segregation, Compensation, Integration-In and Integration-Out. All possible one and two year combinations during the experimental period are shown in the following matrix. Each possible combination of experiences was considered as a potentially representative group which may have occurred. However, an insufficient number of participants and/or incomplete test data precluded analyses of all possible combinations. For these reasons, only those identified with an asterisk warranted analyses. Fortunately, comparisons relating to the crucial groups described in the research questions were possible. Others may have been interesting although they were not of prime importance to the study. (For example, how does one year of Compensation followed by a year of Integration-In compare with two years of Compensation or some other "mix"?)

MATRIX OF POSSIBLE COMPARISONS

1 Year	2 Year			
S*	SS*	SC	S I-in*	S I-out
C*	CS	CC*	C I-in	C I-out
I-in*	I-in S	I-in C	I-in I-in*	I-in I-out
I-out*	I-out S	I-out C	I-out I-in	I-out I-out*

Symbols: S - Segregation
C - Compensation
I-in - Integration Inner City School
I-out - Integration Outer City School

Each symbol in the two year portion represents one year of a sequence.

Pairs of groups involved in the crucial comparisons were matched on the basis of pretest scores on the Peabody Picture Vocabulary Test at the Kindergarten level, the New York State Readiness Tests for Grade One, and Reading Comprehension scores for Grades Two through Six on the tests specified. This permitted the samples being compared to have the desired effects described earlier, i.e. approximately equal means, standard deviations, score ranges, and skewness on the matching variable. The pretest matching variable is underlined in each of the tables appearing in the Appendices B-I. Appendix A contains tables reflecting the matching variable by grade and years of participation.

Since matching on means and standard deviations required omitting some members of classes who were either in the higher or lower portions of their representative total population, the resulting samples were not necessarily representative of the total population. In all cases, however, they were representative of most of their respective population. Where sufficient numbers and data were available, the selection criteria in the matching activity included the pupil's sex along with his or her reading scores.

The statistical treatment applied to the test data provides a test of significance between matched group mean differences. The standard errors of the mean for both the matching or control variable and the criterion variables were computed. T-tests for independent samples were computed on the matching and pretest variables and matched group t-tests were computed for the posttest variables. Where the independent t-test between the means of the groups on the matching variable provided a "t" greater than one, or if the experimental differences were opposite to any residual difference obtained on the matching variable, a one-way analysis of covariance was substituted for the matched group t-tests on the post variable.

The tables found in the Appendices B-I, where the one-way analysis of covariance was performed, contain both the t-test and covariance analyses. When interpreting these tables, it is important to remember that the one-way analysis of covariance was substituted for the t-test and decisions or interpretations should be based on the covariance results.

In each instance, the null hypothesis formulated and tested for statistical significance was that there would be no difference between the two groups with respect to achievement as measured by the specified tests. Throughout this study, significance is accepted at the .05 level of confidence.

The detailed results of the test data analyses have been summarized in tabular form for each question in the Appendix. Each table shows the pre-posttest means, standard deviations, numbers of pupils, and "t" or "F" ratios.

Attendance, presented as the number of full days absent (with 181 days possible), Social Growth, and Work Habits have also been analyzed. The latter two measurements are subject to the variations of interpretation and judgement normally associated with subjective teacher appraisals and should be viewed accordingly.

Throughout the remaining sections, reference to the names of specific schools is minimized. The report refers to the "Experimental School", the school having "Compensation", and the "Control School". As an addition to those school and program descriptions found under Component One and Component Two in the Introduction, the following explanations are offered:

> School No. 2 is designated as the "Experimental School". Highlighted for its inner city integrated classrooms resulting from the reverse open enrollment of white pupils, the building is further distinguished by features designed to provide enrichment experiences. Project BEACON, focused at the primary level, has an undetermined affect on the study at hand. MAP, the Major Achievement Program, provided accelerated experiences to fifth and sixth graders. Therefore, none of these pupils was included among any group selected for this research; the program's effects upon the whole school program are unknown and beyond the scope of this study.
>
> School No. 3 is the facility having Compensation emphases, i.e. ancillary, remedial and supportive services. Virtually segregated in enrollment, it is represented in this study by selected pupils from Grades One, Two, and Three. Here, as is true throughout this evaluation, the selection process made it unlikely that the influences from any one classroom would have a disproportionate effect on the grade level sample.
>
> School No. 4, the "Control School", though racially comparable to School No. 3, does not have the amount of programs and services allotted both School No. 2 and 3. The assumption is made that the achievement of these

Grade Two and Four pupils (now in their second year as controls) represents the general level of achievement of the School No. 4 student body per se.

Hereafter, unless designated, the groups referred to in the Appendices are comprised of black pupils. The reader must view each table as a part of a whole--a series of comparisons, which if taken out of the context, may result in an inaccurate perspective.

V. EVALUATION MEASURES

A. Standardized Tests

In order to provide answers to the questions raised in the previous section (Design and Data Analysis), pupil achievement at each grade level was compared by utilizing data from standardized tests. Participants involved for two years were pretested at the beginning of the 1967-68 school year while the one year participants were given pretests in October 1968--near the beginning of the 1968-69 school year. All posttests were administered in late May 1969--near the end of the school year. A description of the tests given at each grade level follows.

KINDERGARTEN

Peabody Picture Vocabulary Test
Pretest, Form A

The Peabody Picture Vocabulary Test is designed to provide an estimate of a subject's verbal capacity by measuring his hearing vocabulary. The test may be administered in a group or individual situation with subjects from the preschool level through high school. The kindergarten pupils in this study were tested individually by a staff member from the Department of Planning and Research.

The Peabody test booklet, which contains four clearly drawn pictures per page, is placed before the subject. The examiner pronounces a word from a list of stimulus items and asks the subject to indicate in whatever manner he chooses (either verbally or by pointing) which one of the four pictures corresponds to the spoken word. The examiner records the response and both subject and examiner proceed to the next page and item respectively.

The limits of the test differ for each individual. A "basal" is established when eight consecutive correct responses have been made; the "ceiling" is reached when a subject makes six errors in eight consecutive responses. A pupil's raw score is the number of pictures correctly identified; maximum possible raw score is 150 points.

GRADE ONE

1. The New York State Readiness Tests

Word Meaning (16 items)--Measures vocabulary. Pupil selects from three pictures the one that illustrates the word the examiner names.

Listening (16 items)--Measures the ability to comprehend phrases and sentences instead of indivudual words.

Matching (14 items)--Measures visual perception involving recognition of similarities.

Alphabet (16 items)--Measures the ability to recognize lower case letters of the alphabet.

Numbers (26 items)--Measures general number knowledge including achievement in number vocabulary, counting, ordinal numbers, meaning of fractional parts, recognition of forms, telling time, and the use of numbers in simple problems.

Copying (14 items)--Measures a combination of visual, perception and motor control skills.

The total maximum possible raw score for these tests is 102 points.

2. The Metropolitan Achievement Tests, Primary I Battery, Posttest, Form C

Word Knowledge (35 items)--Measures sight vocabulary or word recognition ability.

Reading (45 items)--Measures sentence comprehension (13 items) and paragraph comprehension (32 items).

Arithmetic Concepts and Skills (63 items)--Measures mastery of basic numerical and quantitative concepts that are essential to understanding beginning stages of arithmetic, ability to solve verbal problems, and ability to perform addition and subtraction exercises.

The scores from each of the subtests are reported independently.

GRADE TWO

The Metropolitan Achievement Tests, Primary II Battery (Pretest, Form A; Posttest, Form C)

Word Knowledge (37 items)--Measures word recognition and understanding. The first seventeen items are of the picture-vocabulary type in which the child demonstrates his recognition of a word by associating it with a picture. In the last twenty items a stimulus word is presented in written form and the child demonstrates his understanding by choosing from among four alternative written responses.

Reading (51 items)--Measures the ability to comprehend sentences (13 items) and to comprehend materials of paragraph length (38 items).

p 16
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Arithmetic (72 items)--Part A, Concepts and Problem Solving, consists of forty-two items providing a comprehensive measure of the child's mastery of basic numerical and quantitative concepts essential to understanding early stages of arithmetic and ability to solve verbal problems. Part B, Computation, consists of thirty computational exercises covering addition and subtraction skills ranging in difficulty from basic addition facts to subtraction of three-place numbers.

The scores from each subtest are reported independently.

GRADE THREE

Reading Test for New York State Elementary Schools, Grade Three (Pretest, Form A; Posttest, Form B)

Part I - Word Recognition (25 items)--Measures how well a pupil can distinguish the correct word from others with which it may be confused. The teacher reads the test word, uses it in a sentence, and then repeats the word. The pupil indicates which one of five possible words was read by the teacher.

Part II - Reading Comprehension (28 items)--This test consists of a series of short reading selections, each of which is followed by a number of questions. It gives a measure of the pupil's ability to read a paragraph and understand it. The questions test the ability to recognize the central thought of the selection, to answer questions based on specific statements, to make inferences about the content of the selection, and to discover the meaning of a word from its context.

The total maximum possible raw score for the reading test is 53 points.

2. Arithmetic Test for New York State Elementary Schools, Grade Three (Pretest, Form A; Posttest, Form B)

Part I - Computation (15 items)--Measures performance on fundamental operations in arithmetic.

Part II - Problem Solving (20 items)--Measures ability to solve arithmetic problems.

Part III - Concepts (20 items)--Measures understanding of basic principles and ideas in arithmetic.

The total maximum possible raw score for this test is 55 points.

GRADES FOUR AND FIVE

The Iowa Tests of Basic Skills - Form 4

The Iowa Tests provide for comprehensive measurement in the fundamental areas of vocabulary, reading, mechanics of correct writing, methods of study, and arithmetic. The specific tests used in this study were:

Vocabulary (Grade 4 - 38 items; Grade 5 - 43 items)--Measures knowledge of word meaning.

Reading Comprehension (Grade 4 - 68 items; Grade 5 - 74 items)--Measures understanding of what is read.

Arithmetic Concepts (Grade 4 - 36 items; Grade 5 - 42 items)--Measures understanding of arithmetic terms and operations.

Arithmetic Problem Solving (Grade 4 - 27 items; Grade 5 - 29 items)--Measures problem solving ability.

The raw scores for each of the subtests were reported independently for pupils at both grade levels.

GRADE SIX

1. Reading Test for New York State Elementary Schools, Grade Six (Pretest, Form A; Posttest, Form B)

Part I - Word Recognition (30 items)--Measures how well a pupil can distinguish the correct word from others with which it may be confused. The teacher reads the test word, uses it in a sentence, and then repeats the word. The pupil indicates which one of five possible words was read by the teacher.

Part II - Reading Comprehension (36 items)--This test consists of a series of short reading selections, each of which is followed by a number of questions. It gives a measure of the pupil's ability to read a paragraph and understand it. The questions test the ability to recognize the central thought of the selection, to answer questions based on specific statements, to make inferences about the content of the selection, and to discover the meaning of a word from its context.

The total maximum possible raw score for the reading test is 66 points.

2. Arithmetic Test for New York State Elementary Schools, Grade Six (Pretest, Form A; Posttest, Form B)

Part I - Computation (20 items)--Measures performance on fundamental operations in arithmetic.

Part II - Problem Solving (20 items)--Measures ability to solve arithmetic problems.

Part III - Concepts (20 items)--Measures understanding of basic principles and ideas in arithmetic.

The total maximum possible raw score for this test is 60 points.

B. Additional Information

Data on attendance and teacher evaluation of social growth and work habits were also gathered for pupils in this study in Grades One through Six. Attendance was studied in terms of the total number of days absent for the school year as reported on pupil cumulative records. Only absences for the 1968-69 school year are reported. Social growth and work habits were reduced to a numerical scale in which one is considered "excellent" and five is "poor." In each instance the number represents the teacher's year-end appraisal of the pupil's social growth and work habits for the 1968-69 school year.

VI. SUMMARY OF RESULTS

The general results of each question are presented by grade and the number of years of participation for pupils involved. Subtests, rather than complete test titles and forms are described. These variables, though designated somewhat differently by each test publisher, are essentially Vocabulary, Reading, Arithmetic Concepts, Arithmetic Problem Solving, and Arithmetic Computation. The specific tests are fully described in Section V, Evaluation Measures, and are listed in each table of the Appendix. It is important to keep in mind limitations and restrictions a matching design implies with respect to possible differential pupil-pupil and pupil-teacher interactions operative during the experimental time period.

Question 1: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS).

Compensation vs Segregation - Experimental School

Grade One

2 years: The two groups do not differ significantly on any of the three subtests, Attendance, or the teacher appraisals. The groups are alike in all aspects.

1 year: Although inspection reveals a slight difference in the arithmetic mean in favor of Compensation, the gain is not statistically significant. Essentially, these two groups remain similar on all measures.

Grade Two

2 years: Covariance analysis was substituted because the Readiness scores showed some pretest variation in the groups while the posttest data reflected crossover tendencies in Word Knowledge and Reading. The changes are not significant and the groups appear quite comparable except for a slight observable increase favoring Compensation on the post reading test. This is meaningful in that the pretest results favor Segregation.

Grade Three

2 years: Though the two groups were initially matched fairly well on the control variable (Reading), significant differences favor Segregation on the pretests in both Word Knowledge and Arithmetic Computation. By posttest, the Compensation group shows a slight increase over the Segregation group in Word Recognition. This is not statistically significant, but meaningful in that it's group mean moved from being significantly behind to slightly ahead. Compensation remains proportionally behind in Arithmetic Computation. No other differences are evidenced.

1 year: Compensation pupils show a significant gain in Reading; inspection reveals the segregated pupils experiencing a relatively greater gain in Word Recognition during the test period. The two gains tend to offset each other when viewed in perspective.

Compensation vs Segregation - Control School

Grade Two

2 years: In the comparison with the Control School, despite a slight difference favoring Segregation on the Readiness pretests, Compensation shows significant gains at posttest on three of the four subtests -- Word Knowledge, Reading, and Arithmetic Problem Solving. The Control Group pupils receive a lower teacher rating re Work Habits, significantly different from those pupils in Compensation.

Question 2: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH

> THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND
>
> THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

Compensation vs Integration-In

Grade One

1 year: Social Growth and Work Habit appraisals favor the Compensation group at significant levels. The overall test evidence is not convincing regarding achievement differences.

Grade Two

2 years: There are no significant differences in Word Knowledge, Reading, or Problem Solving after two years. On the Computation measure there is significant change favoring Compensation pupils.

Grade Three

2 years: Analysis of covariance was substituted because of the initial differences in the Reading scores between the Integration-In group versus Compensation (favoring the former). At the end of the two year interval the integrated group exceeds the performance of the compensated group in two (Word Recognition and Problem Solving) of the four variables. Caution requires recognition of posttest differences which may reflect a continuation of the trend which existed up to the time of the pretest. The reality of the differences, therefore, is questionable.

Compensation vs Integration-Out

Grade One

1 year: On two of the three achievement test variables (Reading and Arithmetic Total) along with Work Habits, the gains are statistically significant favoring Compensation. Though starting out somewhat lower on the Readiness tests, they appear to have an edge on all posttest factors. Their gains are noticeable.

Grade Three

1 year: The gain in Word Recognition for the Integration-Out group is significant. All other variables are quite similar, distinguishing no clear advantage to one group over the other.

Question 3: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

Grade One

1 year: Of three comparisons the groups differ only in Arithmetic achievement; those integrated in the home school show the significantly greater gain.

Grade Two

2 years: No differences are found among the variables tested.

Grade Four

2 years: Three of the four posttest comparisons are significant. Transferees made greater gains in Vocabulary. Reading and Problem Solving favor those integrated within their neighborhood school, although the pretest status reduces the implications derived from the latter findings.
Significant are the less favorable ratings transferees receive in Social Growth.

Grade Six

2 years: Those in the inner city integrated classes are judged less mature than their open enrollment counterparts. In achievement none of the four comparisons is significant.

Segregation Followed By a Year of Integration-In vs Integration-Out

Grade Two

2 years: Among the four posttests administered, the area of significant gain (Arithmetic Computation) favors those whose two-year data reflect one year of Segregation followed by a year of integrated experiences at the Experimental School. A visual examination suggests that the transferees made greater achievement gains in Reading and Problem Solving but not at significant levels.

Grade Six

2 years: Though pretest differences are sizeable in Reading and Vocabulary, posttest results do not warrant statistical conclusions vis a vis the groups. Differentials in Absenteeism and Social Growth ratings are manifest; the former favoring Integration-In and the latter Integration-Out.

Question 4: HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

Grade One

2 years: There are no significant differences on the three test variables (Word Knowledge, Reading, and Arithmetic Total). Absenteeism is significantly higher for those who commuted to the inner city school.

1 year: No significant differences evidenced; the groups are similar on all measures.

Grade Two

2 years: The four test measures show no significant differences between the two groups.

Grade Three

2 years: The comparison is INVALID because of the differentials shown on the pretests--THE GROUPS ARE NOT MATCHED!

1 year: Both the five pretest variables and the five post-test variables are close, parallel, and insignificant. The non-test variables follow the same pattern; no differences are noted between the two groups compared.

Grade Four

2 years: Alike on all five pretest variables, the Integration-In group clearly shows significantly greater gains in Arithmetic Concepts and Problem Solving after two years than did their comparison group.

1 year: No significant differences are apparent among the eleven variables.

Grade Five

2 years: No significant differences are found.

1 year: No significant differences are evidenced.

Question 5: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND

THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

Grade One

1 year: Only in total Arithmetic of the three comparisons is there significant difference, favoring integrated classes. Visual inspection of the relative Reading results with respect to the initial difference is interesting though not corroborated by significance testing.

Grade Two

2 years: Of the four cognitive skill measurements, Reading presents the sole area in which a difference is significant supporting integrated pupils.

Grade Three

2 years: Integrated pupils achieved significant differences in the areas of Word Recognition and Arithmetic Problem Solving.

Grade Four

2 years: Posttest results show no achievement differences of any consequence.

Grade Five

2 years: The covariance analysis required by initial differences between groups, indicates that what appears to be significant achievement results are statistically non-significant. Social Growth and Work Habit ratings favor those in integrated classes.

Segregation Followed by a Year of Integration-In vs Integration-In

Grade Two

2 years: Those with two consecutive years of integrated experience achieved significantly greater Reading gains during the experimental period.

Grade Six

2 years: Except for their initial difference in Problem Solving, the performance of these groups was similar for all comparisons. Because the posttest Problem Solving difference did not demonstrate significance, the gains by the two-year integrated pupils are probably greater.

Segregation At Control School vs Integration-In

Grade Two

2 years: In two of the four comparisons, those of the integrated classes achieved at a greater rate than those segregated; Word Knowledge and Reading are the content areas. Attendance is significant, but the number of pupils reduces the impact.

Grade Four

2 years: The statistical advantage of the integrated pupils in Arithmetic Computation is not sustained at the pretest level. In Reading their relative gains are significant.

Question 6: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

Segregation Experimental School vs Integration-Out

Grade One

1 year: The analysis of covariance shows Word Knowledge and Reading of the segregated group to be significantly higher than those for Integration-Out.

Grade Three

1 year: No significant differences are found in these groups' posttest performance. The margin of difference in Word Recognition initially held by the integrated group, however, is appreciably lower.

Grade Four

2 years: The groups, though well matched initially, display distinct posttest differences in Vocabulary, Reading, and Social Growth. Vocabulary favors those pupils who were integrated, the latter two those in segregated classes.

1 year: The only significant difference, Arithmetic Concepts, favors those of segregated classrooms.

Grade Five

2 years: Their similarity is maintained in pre-post comparisons throughout--no significant differences.

Segregation Control School vs Integration-Out

Grade Four

2 years: A remarkable difference is apparent in Vocabulary for those in integrated classrooms as opposed to those in the Control School. Social Growth and Work Habits of the segregated group were rated distinctively higher. (All differences are statistically significant.)

Question 7: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

- WHITE PUPILS IN THE SAME INTEGRATED SETTING
- BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND
- WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

Integration-In(Black Pupils) vs Integration-In(White Pupils)

Grade Two

2 years: Analysis of covariance reveals no statistical significance among the four measures, despite observed differentials which favor black pupils in Reading and Word Knowledge, and white pupils in the area of Arithmetic.

Grade Two

2 years: When a group of black pupils who had one year of Segregation followed by a year of Integration is compared to a group of white pupils with two continuous years of Integration, the results show the latter to have gained significantly greater in Reading and Problem Solving.

Grade Three

2 years: Inspection shows that the pretest mean Reading difference favors black pupils while Word Knowledge and Arithmetic data are quite similar for both groups. By posttest, the greater gains made by black pupils in both Word Recognition and Arithmetic Concepts reached statistical significance.

Grade Five

2 years: Vocabulary and Arithmetic Concepts favor white pupils at significant levels. Pretest differences are slight, with three of the four variables (Reading, Arithmetic Concepts, and Problem Solving) leaning toward this same group.

Note: The latter three sets of comparisons in this sub-section would permit more accurate interpretation of the outcomes if analyses of covariance had been computed. In summary, no conclusive data support generally higher achievement for one group of pupils over the other.

Integration-In(Black Pupils) vs Segregation-Integration

Grade Two

2 years: Those pupils integrated two years show significantly greater Reading gains than their comparison group.

Integration-In(Black Pupils) vs Integration-Out(Resident White Pupils)

Grade Five

2 years: Significant results on the Arithmetic Concepts pretests favor the resident white group. This is reduced to an insignificant level at posttest; overall, each gained close to the same relative amount. Non-test data are quite similar as well.

Question 8: HOW DOES THE ACHIEVEMENT OF BLACK PUPILS, SEGREGATED IN AN INNER CITY SCHOOL WHICH HAS SPECIALLY FUNDED REMEDIAL AND ENRICHMENT SERVICES ALONG WITH PURPOSEFULLY INTEGRATED CLASSES, COMPARE WITH THAT OF BLACK PUPILS IN SEGREGATED CLASSES OF SIMILAR SIZE AND HAVING REMEDIAL SERVICES, BUT FEWER SPECIALLY FUNDED ENRICHMENT EXPERIENCES AND RELATIVELY NO INTEGRATED OPPORTUNITIES?

Grade Two

2 years: In three of four variables (Word Knowledge, Reading, and Problem Solving), the experimental group had significantly greater achievement.

Grade Four

2 years: No significant differences are noted for the four criterion variables.

VII. CONCLUSIONS AND SUMMARY

This is an interim report of the second full year of the Fifteen Point Plan. Evaluation of pupil achievement is expected to continue as an integral part of the program. As demonstrated last year, the majority of comparisons between groups shows no statistical differences. This is not unusual for studies of this type. Over a relatively short period of treatment it is to be expected that unless experimental effects are striking, matched groups will not generally demonstrate large or statistically reliable differences. Differentials in achievement may become more noticeable as the program effects are reinforced with time and through cumulative experiences.

The following tentative conclusions are intended to unite the insights gained through the first two years of the program. As tentative statements they are subject to any change dictated by subsequent analyses. They must be viewed in the perspective from which they emanate--a view which readily admits to the difficulties inherent in attempts to measure overall pupil achievement.

These conclusions are responses to the research questions and follow their sequence.

1. When the achievement of pupils in the Compensatory Educational Program and those of segregated classes in the Experimental School is compared, no conclusive evidence favors either set of educational experiences. The slight margin, however, rests with Compensation. The one comparison between Compensation and the Control School clearly reveals significant advantages favoring Compensation.

   These findings essentially support those of last year's study. What differs is the method of reporting conclusions separately for the two schools having larger class sizes.

Note: Certain unusual stresses which may have had adverse effects upon pupil achievement were identified in the Control School.

2. When the achievement of black pupils in integrated classes of either the enriched inner city school or in outer city schools is compared with Compensation groups, the results do not favor either form of educational experience over the other. This is unlike the 1967-68 conclusions which clearly identified higher achievement for the integrated pupils.

3. A pile up of significant differences at one grade level last year would not permit conclusions to be drawn as to which form of integration experiences yielded greater benefits. Of the comparisons examined this year, the evidence is somewhat more general that those pupils of the Integration-In program achieved at a slightly greater rate than transferees to outer city schools.

4. Eight of nine comparisons between pairs of groups revealed no significant differences between white children who transferred into an inner city school and those attending their neighborhood schools. The one comparison reflecting statistical significance favors the Integration-In group. Last year's conclusion is corroborated - there is no difference of any consequence between these two groups' demonstrated achievement.

5. Within the same school, the educational advantage belongs to those pupils in integrated rather than segregated classes— supporting last year's conclusion. When Integration-In an inner city setting is contrasted with the Control School, the one set of comparisons at the primary level clearly favors the achievement accompanying integration. The results for the intermediate set favor Integration-In, but are less pronounced.

6. Replicating the results of last year, no firm conclusions may be drawn vis a vis the achievement of black pupils in segregated classes of the Experimental School or in integrated classes of the outer city schools. However, the transferees achieved at a greater rate than the Control School's segregated group.

7. When the achievement of resident black pupils of integrated classrooms is compared to that of similar white pupils who either attend the Experimental School or have remained at their neighborhood schools, the few significant differences between the respective groups tend to cancel each other. In short, the groups do not show differential achievement.

   In the one set of measurements comparing black pupils integrated for one as opposed to two years, the two year group achieved significantly higher Reading scores.

8. The achievement of Grade Two pupils segregated at the Experimental school clearly surpasses that of those pupils in segregated classes at the Control School. At the Grade Four level, however, the groups achieved at comparable rates. The two influences i. e. the enriched emphases at the Experimental School and the stresses evidenced at the Control School may have had undetermined impact upon the outcomes.

From data analyzed after two full years of study, it now appears that black pupils who attend integrated classes at their neighborhood school, which has some specially funded enrichment emphases, achieve at a slightly greater rate than children in compensatory programs or those who commute to outer city integrated schools. Pupils, in the two grade levels surveyed at the Control School, more frequently reflect achievement levels which are lower than those of either the Compensatory or Integrated programs. The achievement of white children enrolled at an inner city school is generally not different from that of their home school counterparts; if a difference appears, it seems to favor those who attend the enriched inner city school setting.

Of the initial six research questions, the majority of this year's findings support those of the first year's evaluation report. Where this is not so, data are less clear or convincing and mandate an additional year of investigation. Decisions or choices relating to urban educational practices of the future must be predicated on the authority such longitudinal research may permit.

Appendix A

MATCHING DATA

PRETEST READING RESULTS BY GRADE AND YEARS OF PARTICIPATION

TABLE I

MATCHING DATA - PRETEST RESULTS - GRADE ONE

Group Description	Comp.	Segreg.	Integ.Inner City		Integ.Outer City	
Pupils			Black	White	Black	White
Two Year Participation						
Mean PPVT Score	41.06	41.43		55.85		55.00
St.Dev.	11.81	10.49		12.87		4.67
Number	18	21		13		9
	—	—	—	—	—	—
One Year Participation						
Mean N Y S Readiness	49.72	47.27	50.78	79.00	51.78	78.03
St.Dev.	11.89	12.29	15.78	13.96	14.16	12.95
Number	32	33	18	28	27	31

TABLE II

MATCHING DATA - PRETEST READINESS RESULTS - GRADE TWO

Group Description	Comp.	Segreg.			Integ.-In			Integ.-Out	
Pupils					Black	White	White	Black	Whit
Identification		Mixed* No. 2	No. 2	No. 4		Partial No. 2	No. 2		
Two Year Participation									
Mean N Y S Read. Score	51.74	57.90	56.44	54.71	55.18	61.22	73.79	54.27	72.4
St.Dev.	10.26	15.85	11.29	11.81	10.21	12.88	14.06	13.67	11.8
Number	31	10	36	34	11	9	24	22	2
	—	—	—	—	—	—	—	—	—
One Year Participation									
(None used)									

*Group had one year of segregated followed by one year of integrated classroom experiences during the experimental time period.

TABLE III

MATCHING DATA - PRETEST READING RESULTS - GRADE THREE

Group Description	Comp.	Segreg.	Integ.Inner City		Integ.Outer City	
Pupils			Black	White	Black	White
Two Year Participation						
Mean Rdg. Score	12.16	11.59	16.36	11.30		31.77
St.Dev.	6.14	4.92	9.96	9.88		14.22
Number	31	29	11	10		13
	—	—	—	—	—	—
One Year Participation						
Mean Rdg. Score	10.71	9.00		18.67	12.60	18.67
St.Dev.	2.56	3.84		5.70	4.13	8.53
Number	17	8		9	10	12

TABLE IV

MATCHING DATA - PRETEST READING RESULTS - GRADE FOUR

Group Description	Segregation			Integ.-In		Integ.-Out	
Pupils				Black	White	Black	White
Identification	No. 2		No. 4				
Two Year Participation							
Mean Rdg. Score	10.70		11.60	12.36	18.27	11.39	19.17
St.Dev.	4.05		3.98	4.83	5.56	5.94	5.97
Number	20		35	14	11	18	12
	—	—	—	—	—	—	—
One Year Participation							
Mean Rdg. Score		20.19			44.33	21,83	44.33
St. Dev.		6.60			13.30	6.47	12.76
Number		16			12	18	12

TABLE V

MATCHING DATA - PRETEST READING RESULTS - GRADE FIVE

Group Description	Segregation		Integ.Inner City		Integ.Outer City	
Pupils			Black	White	Black	White
Identification	Partial No. 2	No. 2				
Two Year Participation						
Mean Rdg. Score	17.58	22.78	32.06	34.40	17.69	33.91
St. Dev.	4.84	9.28	10.02	7.39	4.44	8.92
Number	12	18	16	10	13	11
	—	—	—	—	—	—
One Year Participation						
Mean Rdg. Score				43.89		42.00
St. Dev.				11.97		14.31
Number				9		10

TABLE VI

MATCHING DATA - PRETEST READING RESULTS - GRADE SIX

Group Description	Seg.-Integ. (1 yr. ea.)	Integ. Inner City		Integ. Outer City	
Pupils		Black	White	Black	White
Identification	No. 2				
Two Year Participation					
Mean Rdg. Score	24.00	23.56		19.67	
St. Dev.	3.91	5.42		3.86	
Number	8	9		9	
	—	—	—	—	—
One Year Participation					
(None used)					

APPENDIX B

QUESTION ONE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH THAT OF SIMILARLY SEGREGATED BLACK PUPILS IN SCHOOLS HAVING LARGER CLASS SIZES? (THE SPECIALLY FUNDED SUPPLEMENTS DIFFERED FOR EACH OF THE THREE SCHOOLS).

COMPARISON OF SEGREGATION vs COMPENSATION
TWO YEAR PARTICIPANTS-GRADE ONE

Test and Date	Segregation			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest; Oct 1967							
Peabody Pict Voc Test	41.43	10.49	21	41.06	11.81	18	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	24.33	10.67	21	23.39	9.24	18	N S
Reading	25.67	11.93	21	25.06	9.66	18	N S
Total Arith	44.85	14.73	20	44.50	12.17	18	N S
Attendance	11.43	8.86	21	14.33	7.60	12	N S
Social Growth	2.71	0.88	21	2.67	0.62	12	N S
Work Habits	2.71	1.03	21	2.75	0.92	12	N S

COMPARISON OF SEGREGATION vs COMPENSATION
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Segregation			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	47.27	12.29	33	49.72	11.89	32	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	21.15	9.15	33	21.06	6.89	31	N S
Reading	20.94	11.06	33	22.56	7.12	32	N S
Total Arith	41.03	15.54	32	46.13	10.50	32	N S
Attendance	15.97	13.44	33	14.50	9.30	30	N S
Social Growth	2.67	0.88	33	2.50	0.50	30	N S
Work Habits	2.82	1.09	33	2.57	0.56	30	N S

COMPARISON OF COMPENSATION vs SEGREGATION
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Compensation			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	51.74	10.26	31	56.44	11.29	36	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.00	7.00	31	19.67	9.07	36	N S
Reading	30.71	10.77	31	26.25	13.49	36	N S
Arith Pr Solv	28.65	6.16	31	29.19	8.33	36	N S
Arith Comput	20.00	6.52	31	19.78	7.09	36	N S
Attendance	11.90	10.81	29	12.33	11.48	36	N S
Social Growth	2.55	0.97	29	2.44	1.04	36	N S
Work Habits	2.28	0.94	29	2.67	1.18	36	N S
Analysis of Covar*							F
Word Knowledge	21.45		31	19.28		36	N S
Reading	31.72		31	25.38		36	N S
Arith Pr Solv	29.34		31	28.59		36	N S
Arith Comput	20.63		31	19.24		36	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF SEGREGATION vs COMPENSATION
TWO YEAR PARTICIPANTS-GRADE THREE

Test and Date	Segregation			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
Metro Ach Pr II							
Word Knowledge	10.59	4.75	29	7.87	4.80	31	Sig
Reading	11.59	4.92	29	12.16	6.14	31	N S
Arith Pr Solv	15.32	5.73	28	13.42	4.51	31	N S
Arith Comput	8.82	4.19	28	4.97	4.80	31	Sig
Posttest: May 1969							
N Y S Gr 3							
Word Recog	16.33	5.03	27	16.81	6.28	31	N S
Reading	15.85	5.07	27	16.65	5.12	31	N S
Arith Comput	12.96	2.76	28	10.97	3.99	31	Sig
Arith Pr Solv	11.29	4.06	28	11.29	4.28	31	N S
Arith Concepts	11.43	3.70	28	9.55	3.62	31	N S
Attendance	8.32	5.67	28	11.31	7.13	29	N S
Social Growth	2.68	1.20	28	2.53	0.76	30	N S
Work Habits	2.68	1.17	28	2.83	0.73	30	N S

COMPARISON OF COMPENSATION vs SEGREGATION
ONE YEAR PARTICIPANTS-GRADE THREE

Test and Date	Compensation			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
N Y S Gr 3							
Word Recog	12.53	4.22	17	8.50	4.24	8	Sig
Reading	10.71	2.56	17	9.00	3.84	8	N S
Arith Comput	5.59	3.05	17	6.00	3.32	8	N S
Arith Pr Solv	7.94	3.40	17	6.13	2.20	8	N S
Arith Concepts	4.29	2.08	17	3.50	1.73	8	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	16.76	4.12	17	17.50	4.56	8	N S
Reading	20.06	4.11	17	14.50	3.43	8	Sig
Arith Comput	12.88	1.49	17	12.00	2.51	7	N S
Arith Pr Solv	12.65	3.60	17	11.29	1.67	7	N S
Arith Concepts	12.00	3.55	17	10.29	2.55	7	N S
Attendance	13.40	10.05	15	16.25	7.48	8	N S
Social Growth	2.88	0.70	16	3.25	0.43	8	N S
Work Habits	2.75	0.66	16	3.00	0.50	8	N S
Analysis of Covar*							F
Word Recog	16.11		17	18.88		8	N S
Reading	20.15		17	14.30		8	Sig
Arith Comput	12.89		17	11.97		7	N S
Arith Pr Solv	12.48		17	11.68		7	N S
Arith Concepts	11.97		17	10.36		7	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF COMPENSATION vs SEGREGATION(CONTROL SCHOOL)
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Compensation			Segregation(Control)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	51.74	10.26	31	54.94	11.91	33	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.00	7.00	31	15.67	6.04	33	Sig
Reading	30.71	10.77	31	19.79	10.49	33	Sig
Arith Pr Solv	28.65	6.16	31	24.42	8.16	33	Sig
Arith Comput	20.00	6.52	31	17.36	5.42	33	N S
Attendance	11.90	10.81	29	8.00	8.02	32	N S
Social Growth	2.55	0.98	29	2.81	0.77	32	N S
Work Habits	2.28	0.94	29	2.91	0.68	32	Sig

APPENDIX C

QUESTION TWO

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS ATTENDING A SCHOOL WITH SMALL CLASS SIZE (AVERAGE K-3 = 17.2) COMPARE WITH

> THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL AND
>
> THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

COMPARISON OF INTEGRATION-IN vs COMPENSATION
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Integration-In			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	50.78	15.78	18	49.72	11.89	32	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	20.39	7.57	18	21.06	6.89	31	N S
Reading	17.94	9.78	16	22.56	7.12	32	N S
Total Arith	48.75	9.30	16	46.12	10.50	32	N S
Attendance	16.39	16.49	18	14.50	9.30	30	N S
Social Growth	2.83	0.50	18	2.50	0.50	30	Sig
Work Habits	3.06	0.85	18	2.57	0.56	30	Sig

COMPARISON OF INTEGRATION-IN vs COMPENSATION
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	55.18	10.21	11	51.74	10.26	31	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	24.27	5.05	11	21.00	7.00	31	N S
Reading	35.82	9.49	11	30.71	10.77	31	N S
Arith Pr Solv	26.55	6.58	11	28.65	6.16	31	N S
Arith Comput	15.91	6.07	11	20.00	6.52	31	Sig
Attendance	18.13	14.75	8	11.90	10.81	29	N S
Social Growth	2.50	0.71	8	2.55	0.97	29	N S
Work Habits	3.00	0.71	8	2.28	0.94	29	N S

COMPARISON OF INTEGRATION-IN vs COMPENSATION
TWO YEAR PARTICIPANTS-GRADE THREE

Test and Date	Integration-In			Compensation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
Metro Ach Pr II							
Word Knowledge	12.45	6.04	11	7.87	4.80	31	Sig
Reading	16.36	9.96	11	12.16	6.14	31	N S
Arith Pr Solv	17.73	4.47	11	13.42	4.51	31	Sig
Arith Comput	9.00	3.64	11	4.97	4.80	31	Sig
Posttest: May 1969							
N Y S Gr 3							
Word Recog	22.90	2.59	10	16.81	6.28	31	Sig
Reading	20.50	5.04	10	16.65	5.12	31	Sig
Arith Comput	14.09	1.56	11	10.97	3.99	31	Sig
Arith Pr Solv	15.55	2.74	11	11.29	4.28	31	Sig
Arith Concepts	15.50	2.62	10	9.55	3.62	31	Sig
Attendance	11.82	9.22	11	11.31	7.13	29	N S
Social Growth	2.36	0.88	11	2.53	0.76	30	N S
Work Habits	2.73	0.62	11	2.83	0.73	30	N S
Analysis of Covar*							F
Word Recog	21.95		10	17.11		31	Sig
Reading	19.64		10	16.92		31	N S
Arith Comput	13.32		11	11.24		31	N S
Arith Pr Solv	15.08		11	11.45		31	Sig

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF COMPENSATION vs INTEGRATION-OUT
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Compensation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	49.72	11.89	32	51.78	14.16	27	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	21.06	6.89	31	18.37	7.20	27	N S
Reading	22.56	7.12	32	18.11	8.01	27	Sig
Total Arith	46.13	10.50	32	40.38	12.72	27	Sig
Attendance	14.50	9.30	30	19.27	13.54	26	N S
Social Growth	2.50	0.50	30	2.72	0.72	25	N S
Work Habits	2.57	0.56	30	3.00	0.80	25	Sig

COMPARISON OF COMPENSATION vs INTEGRATION-OUT
ONE YEAR PARTICIPANTS-GRADE THREE

Test and Date	Compensation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
Metro Ach Pr II							
Word Recog	12.53	4.22	17	14.00	5.59	10	N S
Reading	10.71	2.56	17	12.60	4.13	10	N S
Arith Comput	5.59	3.05	17	7.00	3.03	10	N S
Arith Pr Solv	7.94	3.40	17	8.80	4.17	10	N S
Arith Concepts	4.29	2.08	17	5.00	2.79	10	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	16.76	4.12	17	21.10	2.47	10	Sig
Reading	20.06	4.11	17	18.20	5.00	10	N S
Arith Comput	12.88	1.49	17	12.10	1.81	10	N S
Arith Pr Solv	12.65	3.60	17	13.90	3.05	10	N S
Arith Concepts	12.00	3.55	17	11.50	4.39	10	N S
Attendance	13.40	10.05	15	16.70	6.48	10	N S
Social Growth	2.88	0.70	16	3.20	0.60	10	N S
Work Habits	2.75	0.66	16	3.10	0.54	10	N S

APPENDIX D

QUESTION THREE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS?

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	50.78	15.78	18	51.78	14.16	27	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	20.39	7.57	18	18.37	7.20	27	N S
Reading	17.94	9.78	16	18.11	8.01	27	N S
Total Arith	48.75	9.30	16	40.37	12.72	27	Sig
Attendance	16.39	16.49	18	19.27	13.54	26	N S
Social Growth	2.83	0.50	18	2.72	0.72	25	N S
Work Habits	3.06	0.85	18	3.00	0.80	25	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	55.18	10.21	11	54.27	13.67	22	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	24.27	5.05	11	22.64	8.31	22	N S
Reading	35.82	9.50	11	30.82	10.48	22	N S
Arith Pr Solv	26.55	6.58	11	27.50	5.89	22	N S
Arith Comput	15.91	6.07	11	15.78	5.42	22	N S
Attendance	18.13	14.75	8	11.19	9.12	21	N S
Social Growth	2.50	0.71	8	2.24	0.88	21	N S
Work Habits	3.00	0.71	8	2.62	0.84	21	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	15.29	5.01	14	14.28	5.98	18	N S
Reading	12.36	4.83	14	11.39	5.94	18	N S
Arith Comput	8.71	2.15	14	5.89	3.12	18	Sig
Arith Pr Solv	8.86	2.67	14	8.00	2.52	18	N S
Arith Concepts	5.50	2.77	14	5.61	2.16	18	N S
Posttest: May 1969							
I T B S							
Vocabulary	15.57	5.91	14	27.39	11.07	18	Sig
Reading	28.29	6.89	14	20.17	9.97	18	Sig
Arith Concepts	16.43	4.75	14	14.06	6.01	18	N S
Arith Pr Solv	13.14	4.41	14	8.61	3.56	18	Sig
Attendance	9.36	13.58	14	14.63	12.75	16	N S
Social Growth	2.50	0.73	14	3.44	0.70	16	Sig
Work Habits	3.00	0.65	14	3.50	1.00	16	N S

COMPARISON OF INTEGRATION-OUT vs INTEGRATION-IN
TWO YEAR PARTICIPANTS-GRADE SIX

Test and Date	Integration-Out			Integration-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	10.67	3.43	9	14.89	3.48	9	Sig
Reading	19.67	3.86	9	23.56	5.42	9	N S
Arith Concepts	13.56	1.50	9	12.00	4.40	9	N S
Arith Pr Solv	7.00	2.40	9	7.00	1.33	9	N S
Posttest: May 1969							
N Y S Gr 6							
Word Recog	6.22	1.93	9	7.44	1.07	9	N S
Reading	7.56	3.24	9	8.89	1.85	9	N S
Arith Comput	4.89	2.51	9	4.44	1.71	9	N S
Arith Pr Solv	3.56	1.64	9	3.78	1.31	9	N S
Arith Concepts	4.56	2.27	9	4.11	1.45	9	N S
Attendance	18.33	14.35	9	9.11	8.63	9	N S
Social Growth	2.00	0.67	9	3.00	0.00	9	Sig
Work Habits	2.89	0.57	9	3.00	0.47	9	N S
Analysis of Covar*							F
Word Recog	6.11		9 9	7.50		9	N S
Reading	7.52		9	8.92		9	N S
Arith Pr Solv	3.56		9	3.78		9	N S
Arith Concepts	4.61		9	4.05		9	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF SEGREGATION-INTEGRATION-IN vs INTEGRATION-OUT TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Seg-Integ-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	57.90	15.85	10	54.27	13.67	22	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.50	6.56	10	22.64	8.31	22	N S
Reading	22.50	10.54	10	30.82	10.48	22	N S
Arith Pr Solv	24.50	6.38	10	27.50	5.89	22	N S
Arith Comput	19.70	2.93	10	15.77	5.42	22	Sig
Attendance	10.20	6.82	5	11.19	9.12	21	N S
Social Growth	2.00	0.00	5	2.24	0.87	21	N S
Work Habits	2.60	0.49	5	2.62	0.84	21	N S

COMPARISON OF INTEGRATION-OUT vs SEGREGATION-INTEGRATION-IN TWO YEAR PARTICIPANTS-GRADE SIX

Test and Date	Integration-Out			Seg-Integ-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	10.67	3.43	9	14.25	2.99	8	Sig
Reading	19.67	3.86	9	24.00	2.99	8	Sig
Arith Concepts	13.56	1.50	9	11.13	4.62	8	N S
Arith Pr Solv	7.00	2.40	9	8.50	1.12	8	N S
Posttest: May 1969							
N Y S Gr 6							
Word Recog	6.22	1.93	9	6.25	1.98	8	N S
Reading	7.56	3.24	9	7.88	1.83	8	N S
Arith Comput	4.89	2.51	9	4.38	1.93	8	N S
Arith Pr Solv	3.56	1.64	9	3.50	1.66	8	N S
Arith Concepts	4.56	2.27	9	4.25	1.92	8	N S
Attendance	18.33	14.35	9	6.25	3.86	8	Sig
Social Growth	2.00	0.67	9	3.13	0.93	8	Sig
Work Habits	2.89	0.57	9	3.38	0.86	8	N S
Analysis of Covar*							F
Word Recog	6.15		9	6.33		8	N S
Reading	7.88		9	7.51		8	N S
Arith Pr Solv	3.35		9	3.73		8	N S
Arith Concepts	4.71		9	4.08		8	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

APPENDIX E

QUESTION FOUR

HOW DOES THE ACHIEVEMENT OF WHITE PUPILS IN RACIALLY INTEGRATED CLASSES AT AN INNER CITY SCHOOL COMPARE WITH THE ACHIEVEMENT OF A SIMILAR GROUP OF WHITE PUPILS IN OUTER CITY SCHOOLS?

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
TWO YEAR PARTICIPANTS-GRADE ONE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
Peabody Pict Voc Test	55.85	12.87	13	55.00	4.67	9	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	28.92	6.43	13	31.78	2.70	9	N S
Reading	31.15	13.42	13	33.44	6.62	9	N S
Total Arith	51.62	9.50	13	57.78	4.26	9	N S
Attendance	15.46	7.78	13	6.22	5.69	9	Sig
Social Growth	1.92	0.92	13	2.00	0.94	9	N S
Work Habits	1.92	1.07	13	2.22	1.03	9	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	79.00	13.96	28	78.03	12.95	31	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	28.82	5.86	28	30.00	6.02	31	N S
Reading	31.39	10.87	28	33.13	11.48	31	N S
Total Arith	56.26	5.91	27	55.48	8.98	31	N S
Attendance	14.39	14.36	28	10.23	9.74	31	N S
Social Growth	2.21	0.67	28	2.03	0.78	31	N S
Work Habits	2.25	0.95	28	1.90	0.89	31	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	73.79	14.06	24	72.44	11.82	25	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	28.33	8.35	24	27.44	7.63	25	N S
Reading	39.88	10.20	24	37.24	8.70	25	N S
Arith Pr Solv	35.33	4.27	24	35.08	4.85	25	N S
Arith Comput	23.58	4.26	24	22.76	4.45	25	N S
Attendance	10.35	6.14	17	6.96	7.33	25	N S
Social Growth	2.36	0.90	17	2.08	1.05	25	N S
Work Habits	2.82	1.20	17	2.32	0.88	25	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
ONE YEAR PARTICIPANTS-GRADE THREE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
Metro Ach Pr II							
Word Recog	20.56	4.22	9	18.42	6.40	12	N S
Reading	18.67	5.70	9	18.67	8.53	12	N S
Arith Comput	10.11	3.03	9	10.75	4.40	12	N S
Arith Pr Solv	13.56	4.67	9	14.00	4.76	12	N S
Arith Concepts	11.22	4.02	9	11.33	4.92	12	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	22.78	4.34	9	20.83	5.21	12	N S
Reading	23.78	2.66	9	20.83	7.65	12	N S
Arith Comput	14.11	1.29	9	13.00	1.96	12	N S
Arith Pr Solv	16.78	2.66	9	15.83	4.08	12	N S
Arith Concepts	16.33	2.79	9	15.17	4.95	12	N S
Attendance	11.75	8.95	8	10.83	8.01	12	N S
Social Growth	2.00	0.71	8	2.33	0.85	12	N S
Work Habits	2.50	0.71	8	2.58	1.26	12	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	18.73	4.69	11	18.17	3.62	12	N S
Reading	18.27	5.56	11	19.17	5.97	12	N S
Arith Comput	10.73	3.69	11	9.17	2.48	12	N S
Arith Pr Solv	12.64	4.33	11	12.92	3.43	12	N S
Arith Concepts	9.82	3.83	11	10.33	2.84	12	N S
Posttest: May 1969							
I T B S							
Vocabulary	27.73	7.34	11	26.50	6.26	12	N S
Reading	42.09	18.10	11	42.50	9.46	12	N S
Arith Concepts	28.27	3.52	11	22.75	4.99	12	Sig
Arith Pr Solv	22.00	2.05	11	17.50	5.24	12	Sig
Attendance	12.80	8.18	10	7.27	5.69	11	N S
Social Growth	1.90	0.83	10	2.18	0.83	11	N S
Work Habits	1.60	0.49	10	1.82	0.94	11	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
ONE YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
I T B S							
Vocabulary	26.67	10.51	12	23.50	6.69	12	N S
Reading	44.33	13.30	12	44.33	12.76	12	N S
Arith Concepts	19.18	6.85	11	22.42	6.13	12	N S
Arith Pr Solv	13.09	4.58	11	14.92	3.86	12	N S
Posttest: May 1969							
I T B S							
Vocabulary	26.92	11.74	12	29.00	6.57	12	N S
Reading	48.50	13.18	12	49.17	12.17	12	N S
Arith Concepts	25.75	9.71	12	25.17	6.85	12	N S
Arith Pr Solv	20.17	4.78	12	20.83	4.56	12	N S
Attendance	15.00	8.56	12	10.58	9.95	12	N S
Social Growth	1.33	0.47	12	1.92	1.04	12	N S
Work Habits	1.58	0.76	12	2.00	1.00	12	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
TWO YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	16.90	7.50	10	21.18	9.59	11	N S
Reading	34.40	7.39	10	33.91	8.92	11	N S
Arith Concepts	15.40	4.05	10	19.18	4.41	11	N S
Arith Pr Solv	11.80	3.94	10	13.73	5.12	11	N S
Posttest: May 1969							
I T B S							
Vocabulary	30.80	6.19	10	29.27	8.74	11	N S
Reading	47.70	13.08	10	47.18	11.47	11	N S
Arith Concepts	29.10	6.61	10	28.27	6.72	11	N S
Arith Pr Solv	18.50	4.70	10	16.09	5.79	11	N S
Attendance	10.60	7.53	10	9.73	7.05	11	N S
Social Growth	1.90	0.83	10	1.73	0.86	11	N S
Work Habits	1.80	1.08	10	1.91	0.90	11	N S

COMPARISON OF INTEGRATION-IN vs INTEGRATION-OUT
WHITE PUPILS
ONE YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Integration-In			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
I T B S							
Vocabulary	24.63	9.05	8	26.30	10.18	10	N S
Reading	43.89	11.97	9	42.00	14.31	10	N S
Arith Concepts	19.44	5.29	9	24.20	6.40	10	N S
Arith Pr Solv	10.89	2.96	9	11.80	4.60	10	N S
Posttest: May 1969							
I T B S							
Vocabulary	32.89	5.70	9	29.90	8.43	10	N S
Reading	49.44	12.37	9	46.80	14.68	10	N S
Arith Concepts	27.11	3.67	9	29.30	8.06	10	N S
Arith Pr Solv	15.56	5.91	9	17.60	4.96	10	N S
Attendance	14.22	8.26	9	7.22	5.65	9	N S
Social Growth	2.22	1.03	9	2.56	0.83	9	N S
Work Habits	2.44	1.26	9	2.33	0.82	9	N S

APPENDIX F

QUESTION FIVE

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES COMPARE WITH

> THE ACHIEVEMENT OF PUPILS IN CLASSES ALMOST COMPLETELY BLACK IN ENROLLMENT WITHIN THE SAME SCHOOL AND
>
> THAT OF SEGREGATED PUPILS IN A NEIGHBORING SCHOOL?

COMPARISON OF INTEGRATION-IN vs SEGREGATION ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Integration-In			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	50.78	15.78	18	47.27	12.29	33	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	20.39	7.57	18	21.15	9.15	33	N S
Reading	17.94	9.78	16	20.94	11.06	33	N S
Total Arith	48.75	9.30	16	41.03	15.54	32	Sig
Attendance	16.39	16.49	18	15.97	13.44	33	N S
Social Growth	2.83	0.50	18	2.67	0.88	33	N S
Work Habits	3.06	0.85	18	2.82	1.09	33	N S

COMPARISON OF INTEGRATION-IN vs SEGREGATION
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	55.18	10.21	11	56.44	11.29	36	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	22.27	5.05	11	19.67	9.07	36	N S
Reading	35.82	9.49	11	26.25	13.49	36	Sig
Arith Pr Solv	26.55	6.58	11	29.19	8.33	36	N S
Arith Comput	15.91	6.07	11	19.78	7.09	36	N S
Attendance	18.13	14.75	8	12.33	11.48	36	N S
Social Growth	2.50	0.71	8	2.44	1.04	36	N S
Work Habits	3.00	0.71	8	267	1.18	36	N S

COMPARISON OF INTEGRATION-IN vs SEGREGATION
TWO YEAR PARTICIPANTS-GRADE THREE

Test and Date	Integration-In			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
Metro Ach Pr II							
Word Knowledge	12.45	6.04	11	10.59	4.75	29	N S
Reading	16.36	9.96	11	11.59	4.92	29	N S
Arith Pr Solv	17.73	4.47	11	15.32	5.73	28	N S
Arith Comput	9.00	3.64	11	8.82	4.19	28	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	22.90	2.59	10	16.33	5.03	27	Sig
Reading	20.50	5.04	10	15.85	5.07	27	Sig
Arith Comput	14.09	1.56	11	12.96	2.76	28	N S
Arith Pr Solv	15.55	2.74	11	11.29	4.06	28	Sig
Arith Concepts	15.50	2.62	10	11.43	3.70	28	Sig
Attendance	11.82	9.22	11	8.32	5.67	28	N S
Social Growth	2.36	0.88	11	2.68	1.20	28	N S
Work Habits	2.73	0.62	11	2.68	1.17	28	N S
Analysis of Covar*							F
Word Recog	22.11		10	16.63		27	Sig
Reading	19.92		10	16.07		27	N S
Arith Comput	14.08		11	13.08		27	N S
Arith Pr Solv	15.41		11	11.43		27	Sig

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF INTEGRATION-IN vs SEGREGATION
TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Integration-In			Segregation			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	15.29	5.01	14	14.30	5.55	20	N S
Reading	12.36	4.83	14	10.70	4.05	20	N S
Arith Comput	8.71	2.15	14	6.20	3.26	20	Sig
Arith Pr Solv	8.86	2.67	14	7.40	3.41	20	N S
Arith Concepts	5.50	2.77	14	5.75	2.59	20	N S
Posttest: May 1969							
I T B S							
Vocabulary	15.57	5.91	14	13.50	6.14	20	N S
Reading	28.29	6.89	14	26.30	10.79	20	N S
Arith Concepts	16.43	4.75	14	15.15	5.09	20	N S
Arith Pr Solv	13.14	4.41	14	10.60	5.15	20	N S
Attendance	9.36	13.58	14	10.68	9.12	19	N S
Social Growth	2.50	0.73	14	2.55	0.59	20	N S
Work Habits	3.00	0.65	14	3.00	0.95	20	N S
Analysis of Covar*							F
Vocabulary	15.33		14	13.67		20	N S
Reading	27.25		14	27.02		20	N S
Arith Concepts	16.58		14	15.04		20	N S
Arith Pr Solv	12.33		14	11.17		20	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

Q-5

COMPARISON OF SEGREGATION vs INTEGRATION-IN
TWO YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Segregation			Integration-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	10.39	4.47	18	18.56	7.25	16	Sig
Reading	22.78	9.28	18	32.06	10.02	16	Sig
Arith Concept	11.17	4.35	18	13.69	6.50	16	N S
Arith Pr Solv	7.61	4.64	18	10.75	4.39	16	N S
Posttest: May 1969							
I T B S							
Vocabulary	18.06	6.15	18	25.00	7.37	16	Sig
Reading	30.33	10.43	18	41.13	13.17	16	Sig
Arith Concept	17.67	7.34	18	22.44	7.45	16	N S
Arith Pr Solv	10.78	3.34	18	15.19	6.31	16	Sig
Attendance	9.11	8.66	18	8.81	7.36	16	N S
Social Growth	2.61	0.83	18	1.94	0.90	16	Sig
Work Habits	3.11	0.94	18	2.38	0.99	16	Sig
Analysis of Covar*							F
Vocabulary	20.86		18	21.84		16	N S
Reading	33.48		18	37.59		16	N S
Arith Concept	18.78		18	21.18		16	N S
Arith Pr Solv	11.55		18	14.32		16	N S

*Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF SEGREGATION-INTEGRATION-IN vs INTEGRATION-IN TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Seg-Integ-In			Integration-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	57.90	15.85	10	55.18	10.21	11	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.50	6.56	10	24.27	5.05	11	N S
Reading	22.50	10.54	10	35.82	9.49	11	Sig
Arith Pr Solv	24.50	6.38	10	26.55	6.58	11	N S
Arith Comput	19.70	2.93	10	15.91	6.07	11	N S
Attendance	10.20	6.82	5	18.13	14.75	8	N S
Social Growth	2.00	0.00	5	2.50	0.71	8	N S
Work Habits	2.60	0.49	5	3.00	0.71	8	N S

COMPARISON OF INTEGRATION-IN vs SEGREGATION-INTEGRATION-IN
TWO YEAR PARTICIPANTS-GRADE SIX

Test and Date	Integration-In			Seg-Integ-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	14.89	3.48	9	14.25	2.99	8	N S
Reading	23.56	5.42	9	24.00	3.91	8	N S
Arith Concepts	12.00	4.40	9	11.13	4.62	8	N S
Arith Pr Solv	7.00	1.33	9	8.50	1.12	8	Sig
Posttest: May 1969							
N Y S Gr 6							
Word Recog	7.44	1.07	9	6.25	1.98	8	N S
Reading	8.89	1.85	9	7.88	1.83	8	N S
Arith Comput	4.44	1.71	9	4.38	1.93	8	N S
Arith Pr Solv	3.78	1.31	9	3.50	1.66	8	N S
Arith Concepts	4.11	1.45	9	4.25	1.92	8	N S
Attendance	9.11	8.63	9	6.25	3.86	8	N S
Social Growth	3.00	0.00	9	3.13	0.93	8	N S
Work Habits	3.00	0.47	9	3.38	0.86	8	N S

COMPARISON OF INTEGRATION-IN vs SEGREGATION (CONTROL SCHOOL)
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In			Segregation (Control)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	55.18	10.21	11	54.71	11.81	34	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	24.27	5.05	11	16.03	6.30	34	Sig
Reading	35.82	9.49	11	20.35	10.83	34	Sig
Arith Pr Solv	26.55	6.58	11	24.24	8.11	34	N S
Arith Comput	15.91	6.07	11	17.24	5.39	34	N S
Attendance	18.13	14.75	8	8.06	7.90	33	Sig
Social Growth	2.50	0.71	8	2.82	0.76	33	N S
Work Habits	3.00	0.71	8	2.88	0.69	33	N S

COMPARISON OF INTEGRATION-IN vs SEGREGATION(CONTROL SCHOOL)
TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Integration-In			Segregation(Control)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	15.29	5.01	14	14.06	4.80	35	N S
Reading	12.36	4.83	14	11.60	3.98	35	N S
Arith Comput	8.71	2.15	14	6.00	3.55	35	Sig
Arith Pr Solv	8.86	2.67	14	7.17	3.63	35	N S
Arith Concepts	5.50	2.77	14	5.40	2.45	35	N S
Posttest: May 1969							
I T B S							
Vocabulary	15.57	5.91	14	15.74	5.59	35	N S
Reading	28.29	6.89	14	22.94	9.16	35	Sig
Arith Concepts	16.43	4.75	14	14.34	4.92	35	N S
Arith Pr Solv	13.14	4.41	14	10.43	5.43	35	N S
Attendance	9.36	13.58	14	9.59	8.25	34	N S
Social Growth	2.50	0.73	14	2.56	0.98	34	N S
Work Habits	3.00	0.65	14	2.50	0.98	34	N S

APPENDIX G

QUESTION SIX

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN OUTER CITY SCHOOLS COMPARE WITH THE ACHIEVEMENT OF BLACK PUPILS IN CLASSES ALMOST COMPLETELY BLACK AT TWO INNER CITY SCHOOLS?

COMPARISON OF SEGREGATION vs INTEGRATION-OUT
ONE YEAR PARTICIPANTS-GRADE ONE

Test and Date	Segregation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1968							
N Y S Readiness	47.27	12.29	33	51.78	14.16	27	N S
Posttest: May 1969							
Metro Ach Pr I							
Word Knowledge	21.15	9.15	33	18.37	7.20	27	N S
Reading	20.94	11.06	33	18.11	8.01	27	N S
Total Arith	41.03	15.54	32	40.37	12.72	27	N S
Attendance	15.97	13.44	33	19.27	13.54	26	N S
Social Growth	2.67	0.88	33	2.72	0.72	25	N S
Work Habits	2.82	1.09	33	3.00	0.80	25	N S
Analysis of Covar*							F
Word Knowledge	21.81		33	17.56		27	Sig
Reading	21.73		33	17.14		27	Sig
Total Arith	42.38		32	38.77		27	N S

* Covariance Adjusted Posttest Means for each corresponding Pretest Variable

COMPARISON OF SEGREGATION vs INTEGRATION-OUT
ONE YEAR PARTICIPANTS-GRADE THREE

Test and Date	Segregation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
N Y S Gr 3							
Word Recog	8.50	4.24	8	14.00	5.59	10	Sig
Reading	9.00	3.84	8	12.60	4.13	10	N S
Arith Comput	6.00	3.32	8	7.00	3.03	10	N S
Arith Pr Solv	6.13	2.20	8	8.80	4.17	10	N S
Arith Concepts	3.50	1.73	8	5.00	2.79	10	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	17.50	4.56	8	21.10	2.47	10	N S
Reading	14.50	3.43	8	18.20	5.00	10	N S
Arith Comput	12.00	2.51	7	12.10	1.81	10	N S
Arith Pr Solv	11.29	1.67	7	13.90	3.05	10	N S
Arith Concepts	10.29	2.55	7	11.50	4.39	10	N S
Attendance	16.25	7.48	8	16.70	6.48	10	N S
Social Growth	3.25	0.43	8	3.20	0.60	10	N S
Work Habits	3.00	0.50	8	3.10	0.54	10	N S
Analysis of Covar*							F
Word Recog	18.22		8	20.53		10	N S
Reading	15.34		8	17.53		10	N S
Arith Comput	12.15		7	12.00		10	N S
Arith Pr Solv	12.02		7	13.38		10	N S
Arith Concepts	11.13		7	10.91		10	N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

COMPARISON OF SEGREGATION vs INTEGRATION-OUT
TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Segregation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	14.30	5.55	20	14.28	5.98	18	N S
Reading	10.70	4.05	20	11.39	5.94	18	N S
Arith Comput	6.20	3.26	20	5.89	3.12	18	N S
Arith Pr Solv	7.40	3.41	20	8.00	2.52	18	N S
Arith Concepts	5.75	2.59	20	5.61	2.16	18	N S
Posttest: May 1969							
I T B S							
Vocabulary	13.50	6.14	20	27.39	11.07	18	Sig
Reading	26.30	10.79	20	20.17	9.97	18	Sig
Arith Concepts	15.15	5.09	20	14.06	6.01	18	N S
Arith Pr Solv	10.60	5.15	20	8.61	3.56	18	N S
Attendance	10.68	9.12	19	14.63	12.75	16	N S
Social Growth	2.55	0.59	20	3.44	0.70	16	Sig
Work Habits	3.00	0.95	20	3.50	1.00	16	N S

COMPARISON OF SEGREGATION vs INTEGRATION-OUT ONE YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Segregation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1968							
I T B S							
Vocabulary	11.40	3.48	15	11.11	4.70	18	N S
Reading	20.19	6.60	16	21.83	6.47	18	N S
Arith Concepts	11.50	3.37	16	11.61	5.01	18	N S
Arith Pr Solv	7.13	3.64	16	6.39	2.03	18	N S
Posttest: May 1969							
I T B S							
Vocabulary	12.69	6.51	16	14.67	5.83	18	N S
Reading	24.25	8.47	16	26.50	6.77	18	N S
Arith Concepts	16.73	4.54	15	12.39	4.93	18	Sig
Arith Pr Solv	10.60	4.33	15	10.39	4.60	18	N S
Attendance	16.19	9.09	16	14.31	11.48	16	N S
Social Growth	2.94	0.66	16	2.88	0.68	17	N S
Work Habits	3.19	0.73	16	3.18	1.10	17	N S

COMPARISON OF SEGREGATION* vs INTEGRATION-OUT
TWO YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Segregation			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	9.33	4.35	12	9.92	3.12	13	N S
Reading	17.58	4.84	12	17.69	4.44	13	N S
Arith Concepts	10.17	3.83	12	9.08	2.02	13	N S
Arith Pr Solv	5.75	4.13	12	7.08	3.45	13	N S
Posttest: May 1969							
I T B S							
Vocabulary	16.17	4.56	12	16.38	7.00	13	N S
Reading	27.50	9.57	12	26.62	10.67	13	N S
Arith Concepts	14.58	4.13	12	12.31	6.58	13	N S
Arith Pr Solv	9.67	2.39	12	10.54	4.96	13	N S
Attendance	10.25	9.90	12	7.85	9.45	13	N S
Social Growth	2.83	0.90	12	3.15	0.77	13	N S
Work Habits	3.42	0.86	12	3.08	0.83	13	N S

* A subgroup, selected specifically for matching purposes, and thus not representative of the total Grade Five Segregation sample used elsewhere.

COMPARISON OF SEGREGATION(CONTROL SCHOOL) vs INTEGRATION-OUT TWO YEAR PARTICIPANTS-GRADE FOUR

Test and Date	Segregation (Control)			Integration-Out			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
N Y S Gr 3							
Word Recog	13.89	4.84	36	14.28	5.98	18	N S
Reading	12.14	5.06	36	11.39	5.94	18	N S
Arith Comput	6.22	3.74	36	5.89	3.12	18	N S
Arith Pr Solv	7.33	3.70	36	8.00	2.52	18	N S
Arith Concepts	5.40	2.45	35	5.61	2.16	18	N S
Posttest: May 1969							
I T B S							
Vocabulary	15.74	5.59	35	27.39	11.07	18	Sig
Reading	22.94	9.16	35	20.17	9.97	18	N S
Arith Concepts	14.34	4.92	35	14.06	6.01	18	N S
Arith Pr Solv	10.43	5.43	35	8.61	3.56	18	N S
Attendance	9.59	8.25	34	14.63	12.75	16	N S
Social Growth	2.56	0.98	34	3.44	0.70	16	Sig
Work Habits	2.50	0.98	34	3.50	1.00	16	Sig

APPENDIX H

QUESTION SEVEN

HOW DOES THE ACHIEVEMENT OF BLACK PUPILS IN RACIALLY INTEGRATED CLASSES IN AN INNER CITY SCHOOL COMPARE WITH THAT OF

> WHITE PUPILS IN THE SAME INTEGRATED SETTING
>
> BLACK PUPILS IN THE SAME SETTING WHO HAD ONE YEAR OF INTEGRATION SUCCEEDING PRIOR SEGREGATED SCHOOL EXPERIENCES AND
>
> WHITE PUPILS WHO ATTENDED THEIR OWN NEIGHBORHOOD SCHOOLS?

COMPARISON OF
INTEGRATION-IN(WHITE PUPILS)** vs INTEGRATION-IN(BLACK PUPILS)
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In (W)			Integration-In (B)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	61.22	12.88	9	55.18	10.21	11	N S
Posttest: May 1969							
Metro							
Word Knowledge	21.78	8.24	9	24.27	5.05	11	N S
Reading	32.56	12.01	9	35.82	9.49	11	N S
Arith Pr Solv	31.89	4.56	9	26.55	6.58	11	N S
Arith Comput	20.78	5.96	9	15.91	6.07	11	N S
Attendance	8.00	6.27	6	18.13	14.75	8	N S
Social Growth	2.83	1.07	6	2.50	0.71	8	N S
Work Habits	3.83	1.07	6	3.00	0.71	8	N S
Analysis of Covar*							F
Word Knowledge	20.93		9	24.97			N S
Reading	31.49		9	36.69			N S
Arith Pr Solv	30.81		9	27.43			N S
Arith Comput	20.60		9	16.06			N S

* Covariance Adjusted Posttest Means For Each Corresponding Pretest Variable

** A subgroup selected specifically for matching purposes and thus not representative of the total Grade Two sample used elsewhere.

COMPARISON OF
INTEGRATION-IN (WHITE PUPILS) vs
SEGREGATION-INTEGRATION-IN (BLACK PUPILS)
TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Integration-In (W)			Seg-Integ-In (B)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	61.22	12.88	9	57.90	15.85	10	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.78	8.24	9	21.50	6.56	10	N S
Reading	32.56	12.01	9	22.50	10.53	10	Sig
Arith Pr Solv	31.89	4.56	9	24.50	6.38	10	Sig
Arith Comput	20.78	5.96	9	19.70	2.93	10	N S
Attendance	8.00	6.27	6	10.20	6.82	5	N S
Social Growth	2.83	1.07	6	2.00	0.00	5	N S
Work Habits	3.83	1.07	6	2.60	0.49	5	N S

COMPARISON OF
INTEGRATION-IN(WHITE PUPILS) vs INTEGRATION-IN(BLACK PUPILS)
TWO YEAR PARTICIPANTS-GRADE THREE

Test and Date	Integration-In (W)			Integration-In (B)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
Metro Ach Pr II							
Word Knowledge	11.50	5.97	10	12.45	6.04	11	N S
Reading	11.30	9.88	10	16.36	9.96	11	N S
Arith Pr Solv	19.30	7.86	10	17.73	4.47	11	N S
Arith Comput	9.30	3.16	10	9.00	3.64	11	N S
Posttest: May 1969							
N Y S Gr 3							
Word Recog	18.90	4.78	10	22.90	2.59	10	Sig
Reading	19.40	3.95	10	20.50	5.04	10	N S
Arith Comput	12.00	3.92	10	14.09	1.56	11	N S
Arith Pr Solv	13.30	3.95	10	15.55	2.74	11	N S
Arith Concepts	11.50	4.67	10	15.50	2.62	10	Sig
Attendance	17.50	21.47	10	11.82	9.22	11	N S
Social Growth	2.30	0.64	10	2.36	0.88	11	N S
Work Habits	3.10	0.30	10	2.73	0.62	11	N S

COMPARISON OF
INTEGRATION-IN(WHITE PUPILS)vs INTEGRATION-IN(BLACK PUPILS)
TWO YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Integration-In(W)			Integration-In(B)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
I T B S							
Vocabulary	16.90	7.50	10	18.56	7.25	16	N S
Reading	34.40	7.39	10	32.06	10.02	16	N S
Arith Concepts	15.40	4.05	10	13.69	6.50	16	N S
Arith Pr Solv	11.80	3.94	10	10.75	4.39	16	N S
Posttest: May 1969							
I T B S							
Vocabulary	30.80	6.19	10	25.00	7.37	16	Sig
Reading	47.70	13.08	10	41.13	13.17	16	N S
Arith Concepts	29.10	6.61	10	22.44	7.45	16	Sig
Arith Pr Solv	18.50	4.70	10	15.19	6.31	16	N S
Attendance	10.60	7.53	10	8.81	7.36	16	N S
Social Growth	1.90	0.83	10	1.94	0.90	16	N S
Work Habits	1.80	1.08	10	2.38	0.99	16	N S

COMPARISON OF SEGREGATION-INTEGRATION-IN vs INTEGRATION-IN TWO YEAR PARTICIPANTS-GRADE TWO

Test and Date	Seg-Integ-In			Integration-In			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Sept 1967							
N Y S Readiness	57.90	15.85	10	55.18	10.21	11	N S
Posttest: May 1969							
Metro Ach Pr II							
Word Knowledge	21.50	6.56	10	24.27	5.05	11	N S
Reading	22.50	10.54	10	35.82	9.49	11	Sig
Arith Pr Solv	24.50	6.38	10	26.55	6.58	11	N S
Arith Comput	19.70	2.93	10	15.91	6.07	11	N S
Attendance	10.20	6.82	5	18.13	14.75	8	N S
Social Growth	2.00	0.00	5	2.50	0.71	8	N S
Work Habits	2.60	0.49	5	3.00	0.71	8	N S

COMPARISON OF
INTEGRATION-IN(BLACK PUPILS) vs
INTEGRATION-OUT(RESIDENT WHITE PUPILS)
TWO YEAR PARTICIPANTS-GRADE FIVE

Test and Date	Integration-In(B)			Integration-Out(W)			
	Mean	St Dev	N	Mean	St Dev	N	t
Pretest: Oct 1967							
ITBS							
Vocabulary	18.56	7.25	16	21.18	9.59	11	N S
Reading	32.06	10.02	16	33.91	8.92	11	N S
Arith Concepts	13.69	6.50	16	19.18	4.41	11	Sig
Arith Pr Solv	10.75	4.39	16	13.73	5.12	11	N S
Posttest: May 1969							
ITBS							
Vocabulary	25.00	7.37	16	29.27	8.74	11	N S
Reading	41.13	13.17	16	47.18	11.47	11	N S
Arith Concepts	22.44	7.45	16	28.27	6.72	11	N S
Arith Pr Solv	15.19	6.31	16	16.09	5.79	11	N S
Attendance	8.81	7.36	16	9.73	7.05	11	N S
Social Growth	1.94	0.90	16	1.73	0.86	11	N S
Work Habits	2.38	0.99	16	1.91	0.90	11	N S